

Notice of Allowability

Application No.

09/887,848

Examiner

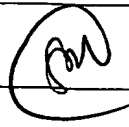
Wilson Lee

Applicant(s)

NEWMAN ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.


1. ☒ This communication is responsive to 6/2/05.
2. ☒ The allowed claim(s) is/are 14, 15 and 17-36.
3. ☒ The drawings filed on 22 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Wilson Lee
Primary Examiner
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Examiner's amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 14, line 2, "THD" is changed to --total harmonic distortion--.

The above change is to verify the definition of THD in order to expedite the application onto allowance.

Allowable subject matter

Claims 14, 15, 17-36 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests the following limitations, in the combination of the remaining elements disclosed in the independent claims:

a means for varying said duty cycle D responsive to said bus voltage to cause said energy storage device to draw more current from said AC power supply around the peak of each half-cycle of said bus voltage and to cause said energy storage device to draw less current from said AC power supply around the trough of each half-cycle of said bus voltage such as required by claim 14;

a cat ear power supply for supplying power to the control circuit, said power supply adapted to draw power from the supply of sinusoidal alternating current power

only during a predetermined portion of each half-cycle of the sinusoidal alternating current power such as required by claim 17;

a valley-fill circuit for receiving the rectified direct current bus voltage and maintaining the bus voltage above a predetermined minimum voltage, the valley-till circuit including an energy storage element, an impedance and a switch, and the energy storage element adapted to be connected between said bus voltage and a circuit common by means of the impedance when the switch is in a first predetermined conductive state so as to store energy such as required by claim 25;

a power supply operatively connected to draw power from said supply of sinusoidal alternating current power, said power supply further operatively connected to supply power to said control circuit, said power supply being the sole source of power for said control circuit such as required by claim 32;

the steps of providing a power supply in said ballast for drawing current from said source of sinusoidal alternating current power during a predetermined portion of each half-cycle of said sinusoidal alternating current power; causing said power supply to draw said current from said source of sinusoidal alternating current power during said predetermined portion of each half-cycle of said sinusoidal alternating current power such as required by claim 34;

varying the conduction of the first controllably device in a predetermined manner within each said half-cycle, so that the energy storing device draws more current from the AC supply during the middle portion of each said half-cycle, and less current from

the AC supply during the beginning and ending portions of each said half-cycle such as required by claim 35;

the steps of within each half-cycle of the AC power supply voltage, varying the conduction of the first controllably device in a predetermined manner so that the energy storing device draws more current from the AC supply during the middle portion of each said half-cycle, and less current from the AC supply during the beginning and ending portions of each said half-cycle such as required by claim 36.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Wilson Lee", written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

6/10/05